UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,135	11/21/2001	Toshiyuki Hagihara	2001-1126A	1742

513 7590 08/06/2008

WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER	
JONES, HEATHER RAE	

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
08/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/914,135	HAGIHARA ET AL.	
	Examiner	Art Unit	
	HEATHER R. JONES	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/23/2001,8/20/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 5 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12-14, 16, and 19 rejected under 35 U.S.C. 102(b) as being anticipated by Abe et al. (U.S. Patent 5,978,546).

Regarding claim **12**, Abe et al. discloses an audio output control device comprising digital audio signal reproduction means for reproducing digital audio signals recorded on a tape, analog audio signal reproduction means for reproducing analog audio signals recorded on said tape, and audio output

switching means for switching between output signal of said digital audio signal reproduction means and output signal of said analog audio signal reproduction means, wherein, when said tape is being driven at a normal playback speed, said audio output switching means is switched so that output signal of said digital audio signal reproduction means is put out, and at a certain speed exceeding the normal playback speed of said tape, output signal of said analog signal reproduction means is put out (Fig. 5 – reproducing system; Fig. 8 – flowchart for controlling the digital and audio output based on tape speed; col. 7, line 48 – col. 8, line 15).

Regarding claim **13**, Abe et al. discloses all the limitations as previously discussed with respect to claim 12, as well as the audio output control device further comprising a microcomputer, wherein said microcomputer controls said audio output switching means (col. 7, lines 7-15; col. 7, line 48 – col. 8, line 15 – the microcomputer determines when to switch from the digital output to the analog output).

Regarding claim **14**, Abe et al. discloses all the limitations as previously discussed with respect to claim 12, including the control of said audio output switching means is performed by a circuit structure other than a microcomputer (Fig. 5 - switching circuit "100"; col. 11, lines 1-17).

Regarding claim **16**, Abe et al. discloses all the limitations as previously discussed with respect to claim 12, including that the switching control of said audio output switching means from output signal of said digital audio signal

reproduction means to output signal of said analog audio signal reproduction means is performed based on VTR tape speed information (Fig. 8; col. 7, lines 7-15; col. 7, line 48 – col. 8, line 15).

Regarding claim **19**, Abe et al. discloses all the limitations as previously discussed with respect to claims 12 and 16, including that the tape speed information is obtained from a time code reproduced from tape or from a servo control circuit (col. 7, lines 7-15).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. as applied to claim 12 above, and further in view of Nakamura (U.S. Patent 5,299,267).

Regarding claim **15**, Abe et al. discloses all the limitations as previously discussed with respect to claim 12, but fails to disclose that the audio output switching means performs switching by inputting output signals of said digital audio signal reproduction means and output signals of said analog audio signal reproduction means, mixing both of them, and continuously and gradually changing the mixing ratio thereof.

Referring to the Nakamura reference, Nakamura discloses an audio output control device wherein the audio output switching means performs switching by inputting output signals of said digital audio signal reproduction means and output signals of said analog audio signal reproduction means, mixing both of them, and continuously and gradually changing the mixing ratio thereof (col. 2, lines 25-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a mixing ratio when changing from a digital audio signal to an analog audio signal and vice versa as disclosed by Nakamura in the device disclosed by Abe et al. in order to allow the device to change the setting of mixing to output an optimal signal as suggested by Nakamura (col. 1, lines 40-45).

6. Claims 17, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. as applied to claim 12 above, and further in view of Yanagawa et al. (U.S. Patent 6,178,288).

Regarding claim **17**, Abe et al. discloses all the limitations as previously discussed with respect to claim 12, but fails to disclose that the switching control of said audio output switching means from output signal of said digital audio signal reproduction means to output signal of said analog audio signal reproduction means is performed based on digital audio signal reproduction error information.

Referring to the Yanagawa et al. reference, Yanagawa et al. discloses an audio output control device wherein the switching control of said audio output switching means from output signal of said digital audio signal reproduction means to output signal of said analog audio signal reproduction means is performed based on digital audio signal reproduction error information (Fig. 4; col. 14, lines 15-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included controlling the switching means based on digital audio signal reproduction error information as disclosed by Yanagawa et al. in the device disclosed by Abe et al. in order to accurately determine when to switch outputs to maximize the quality of audio, especially when one output has several errors in it.

Regarding claim **20**, Abe et al. in view of Yanagawa et al. discloses all the limitations as previously discussed with respect to claims 12 and 17, including that the tape speed information is obtained from a time code reproduced from tape or from a servo control circuit (Abe et al.: col. 7, lines 7-15).

Regarding claim **22**, Abe et al. in view of Yanagawa et al. discloses all the limitations as previously discussed with respect to claims 12 and 17, including that the reproduction error information is that the number of syncs per frame is equal to or less than a predetermined value, or existence of an error flag (Yanagawa et al: Fig. 4; col. 14, lines 15-39).

7. Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe et al. as applied to claim 12 above, and further in view of Kroeger et al. (U.S. Patent 6,178,317).

Regarding claim **18**, Abe et al. discloses all the limitations as previously discussed with respect to claim 12, but fails to disclose a delay circuit is provided between said analog audio signal reproduction means and said audio output switching means, and the delay time of said delay circuit is controlled based on VTR tape speed information.

Referring to the Kroeger et al. reference, Kroeger et al. discloses an audio output control device comprising a delay circuit is provided between said analog audio signal reproduction means and said audio output switching means, and the delay time of said delay circuit is controlled based on VTR tape speed information (col. 7, lines 10-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a delay circuit as disclosed by Kroeger et al. in the device disclosed by Abe et al. in order to have the decoded digital waveform time synchronized with the analog waveform.

Regarding claim **21**, Abe et al. in view of Kroeger et al. discloses all the limitations as previously discussed with respect to claims 12 and 18, including that the tape speed information is obtained from a time code reproduced from tape or from a servo control circuit (Abe et al: col. 7, lines 7-15).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W. Miller/
Supervisory Patent Examiner, Art Unit 2623

Heather R Jones
Examiner
Art Unit 2621

HRJ
July 31, 2008